

WHAT IS CLAIMED IS:

1. A bit allocation apparatus for adaptively allocating quantization bits to one or more subbands in encoding data, said apparatus comprising:

a table storage section storing a bit allocation table that associates the sound information amount of an audible sound with a bit allocation count; and

a bit allocation section for allocating quantization bits to said one or more subbands on the basis of said sound information amount of said audible sound being input and said bit allocation table stored in said table storage section.

2. The apparatus according to claim 1, wherein said sound information amount of said audible sound is an SMR.

3. The apparatus according to claim 1, wherein said table storage section stores bit allocation tables having different contents, and

said bit allocation section allocates quantization bits to said one or more subbands by selectively using one of said bit allocation tables in accordance with an encoding condition.

4. The apparatus according to claim 1, wherein said table storage section stores bit allocation tables having different contents, and

said bit allocation section allocates quantization bits to said one or more subbands by using said bit allocation tables with adaptively

switching them.

5. The apparatus according to claim 4, wherein said bit allocation section selects a bit allocation table to be used first out of said bit allocation tables in accordance with an encoding condition.

6. The apparatus according to claim 1, wherein said table storage section stores bit allocation tables having different contents, and

said bit allocation section allocates quantization bits to said one or more subbands by using a first bit allocation table selected out of said bit allocation tables, changes said first bit allocation table to a second bit allocation table in accordance with the total number of quantization bits allocated to each subband, and re-allocates quantization bits to each subband.

7. The apparatus according to claim 6, wherein said bit allocation section allocates quantization bits by using said second bit allocation table which has been set such that the total number of quantization bits allocated is smaller than that with said first bit allocation table when the total number of quantization bits allocated by using said first bit allocation table is larger than a predetermined value.

8. The apparatus according to claim 6, wherein said bit allocation section allocates quantization bits by using said second bit allocation table which

has been set such that the total number of quantization bits allocated is larger than that with said first bit allocation table when the total number of quantization bits allocated by using said first bit allocation table is smaller than a predetermined value.

9. The apparatus according to claim 6, wherein said bit allocation section allocates quantization bits by using said second bit allocation table which has been set such that the total number of quantization bits allocated is smaller than that with said first bit allocation table when the total number of quantization bits allocated by using said first bit allocation table is larger than a predetermined value, and allocates quantization bits by using said second bit allocation table which has been set such that the total number of quantization bits allocated is larger than that with said first bit allocation table when the total number of quantization bits allocated by using said first bit allocation table is smaller than said predetermined value.

10. The apparatus according to claim 2, wherein said bit allocation table has bit allocation counts set by equally dividing the range of said SMR.

11. The apparatus according to claim 2, wherein said bit allocation table has bit allocation counts set by unequally dividing the range of said SMR.

12. A bit allocation method of adaptively

allocating quantization bits to one or more subbands in encoding data,

wherein a bit allocation table that associates the sound information amount of an audible sound with a bit allocation count is used to allocate quantization bits to said one or more subbands on the basis of said sound information amount of said audible sound being input.

13. The method according to claim 12, wherein said sound information amount of said audible sound is an SMR.

14. The method according to claim 12, wherein bit allocation tables having different contents are prepared and quantization bits are allocated to said one or more subbands by selectively using one of said bit allocation tables in accordance with an encoding condition.

15. The method according to claim 12, wherein bit allocation tables having different contents are prepared and quantization bits are allocated to said one or more subbands by using said bit allocation tables with adaptively switching them.

16. The method according to claim 15, wherein a bit allocation table to be used first is selected out of said bit allocation tables in accordance with an encoding condition.

17. The method according to claim 12, wherein bit allocation tables having different contents are

prepared, quantization bits are allocated to said one or more subbands by using a first bit allocation table selected out of said bit allocation tables, said first bit allocation table is changed to a second bit allocation table in accordance with the total number of quantization bits allocated to each subband, and quantization bits are re-allocated to each subband.

18. The method according to claim 17, wherein quantization bits are allocated by using said second bit allocation table which has been set such that the total number of quantization bits allocated is smaller than that with said first bit allocation table when the total number of quantization bits allocated by using said first bit allocation table is larger than a predetermined value.

19. The method according to claim 17, wherein quantization bits are allocated by using said second bit allocation table which has been set such that the total number of quantization bits allocated is larger than that with said first bit allocation table when the total number of quantization bits allocated by using said first bit allocation table is smaller than a predetermined value.

20. The method according to claim 17, wherein quantization bits are allocated by using said second bit allocation table which has been set such that the total number of quantization bits allocated is

smaller than that with said first bit allocation table when the total number of quantization bits allocated by using said first bit allocation table is larger than a predetermined value, and by using said second bit allocation table which has been set such that the total number of quantization bits allocated is larger than that with said first bit allocation table when the total number of quantization bits allocated by using said first bit allocation table is smaller than said predetermined value.

21. The method according to claim 13, wherein said bit allocation table has bit allocation counts set by equally dividing the range of said SMR.

22. The method according to claim 13, wherein said bit allocation table has bit allocation counts set by unequally dividing the range of said SMR.